

REMARKS

This responds to the Office Action dated on October 18, 2005, and the references cited therewith.

Claims 1, 5, 11, 14-15, 18, 21-23, 27, and 30 are amended, claims 7-8 were previously canceled without prejudice to the Applicants; as a result, claims 1-6 and 9-32 are now pending in this application.

Claim Objections

Claims 1, 11, 15, 18, 21-23, 27, and 30 were objected to due to informalities. Applicant has amended the claims to overcome the objections as suggested by the Examiner. Therefore, these objections are no longer appropriate and should be withdrawn.

§101 Rejection of the Claims

Claims 15-17 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Applicants have amended claim 15, such that it is now implemented in a computer-readable medium. The Examiner appears to assert that since claim 15 is a data structure it is per se non statutory. Applicants respectfully disagree with this interpretation.

First, it is clear that the data structures are permissible subject matter according to the existing law and according to the MPEP.

The legal test as to whether a claim is statutory or not was recently enunciated in *Ex Parte Carl A. Lundgren*, Appeal No. 2003-2088; Application No. 08/093,516; Paper No. 78. In this recent case (labeled as a precedential opinion by the Board of Patent Appeals and Interferences). The “technical arts” test was overruled. The Board stated that once an Examiner determines that a claim is concrete and produces a tangible result, the analysis ends and the claim in question is patentable subject matter for purposes of § 101 analysis. The Board rejected and overruled the Patent Office’s use of the “technical arts” test with respect to determining what is deemed statutory subject matter and what is not deemed statutory subject matter.

What is particular relevant in the *Lundgren* decision is that the Board found that a purely manual process devoid of any physical medium or implementation was in fact statutory subject matter because it was concrete and produced a tangible result. The claims in *Lundgren* were in fact pure business method claims; unlike the present application where claim 15 is in fact implemented within a computer-readable medium as a job quanta data structure. The Board clearly stated that once it is resolved that a claim is concrete and produces a tangible result that the analysis ends and the claim is deemed to be statutory subject matter. The Board went further and stated there is no “technical arts” test or requirement. The decision in *Lundgren* is binding authority that the Patent Office is bound to follow.

In view of this recent decision and in view of the existing rules promulgated by the Patent Office in its own administrative rules of the MPEP, the Applicants believe that the Examiner’s rationale for rejecting claim one is inappropriate.

More specifically, MPEP 2106(IV)(B)(1) states that when “functional descriptive material is recorded in some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since technology permits the function of descriptive material to be realized.” *Emphasis added.* The test is whether the claimed invention as a whole produces a useful and tangible result. There is no longer a technical arts test and the MPEP in 2106 specifically addresses instances where data structure claims are permissible.

In MPEP 2106(IV)(B)(1)(a) data structures claimed in a computer-readable medium that provide for a functional change within a computer are in fact deemed statutory. In the present case, claim 15 is now embodied and implemented in a computer-readable medium as drafted. The claim also provides for the first and second data to be delineated and submitted for processing by separate non-threaded sets of executable instructions. This is interrelationship and provides for a state change within a machine that processes or houses the medium with which the job quanta data structure is implemented. Moreover, technology permits the record to be realized and thus it is statutory according to the direct statements included in MPEP 2106(IV)(B)(1). Claim 15 is functional on its face because it positively recites that it “submitted as input parameter data used for execution by separate non-threaded sets of executable instructions.”

The job quanta data structure is not a mere compilation it is implemented in a computer-readable medium, it is functionally interrelated in that the first and second data are used as parameter data submitted for execution by separate non-threaded sets of executable instructions.

The claim must be read as a whole and the pieces cannot be read in isolation to support a rejection. The law states the entire claim as a whole must be read and when this is done it is clear that there is function and interrelationship and it is clear that technology permits it to be realized as stated by MPEP 2106(IV)(B)(1).

Furthermore, the Examiner's attention is directed to MPEP 2111.02 "Effect of Preamble." Here it is stated: "any terminology in the preamble that limits the structure of the claimed invention must be treated as a claim limitation." *Emphasis added*. Also see, *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1252, 1257 (Fed. Cir. 1989). So the recitation of computer-readable medium in the claim's preamble is sufficient pursuant to the MPEP to provide the structure limitation of a computer embodiment.

Therefore, Applicants assert that claim 15 is in fact statutory and respectfully request a more specific rationale from the Examiner within the context of the existing law and Patent Office Rules (MPEP) to indicate otherwise. Applicants respectfully assert that it is clear from the law and the MPEP that data structure claims are permissible subject matter, and Applicants respectfully assert based on the above claim amendments and remarks that claim 15 as it presently is drafted is acceptable subject matter pursuant to the law and the MPEP.

§112 Rejection of the Claims

Claims 1, 5, 11, 14-15, 18, 21-25, 27, and 30 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. The Examiner has objected to the use of the terms "substantial" and "substantially" asserting that these terms are indefinite based on their broad dictionary definitions within the context of their usages within the claims cited. Applicants have amended the offending claims to limit and constrain the use of these terms consistent with the original filed specification and in some instances to remove the term altogether. For example, the Examiner's attention is directed to the original filed specification page 10 and first full paragraph, where a definition and limitation on substantial is provided. Accordingly, the metes and bounds of this term are now discernable from the claims themselves and the usages are not

now indefinite. Moreover, in some instances the terms have been completely removed from the claims. Therefore, Applicants respectfully request that the rejections be withdrawn.

§102 Rejection of the Claims

Claims 1-6, 9-15, 17-19, and 21-31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Blelloch et al. (U.S. Patent No. 5,768,594). It is of course fundamental that in order to sustain an anticipation rejection that each and every step or element in the rejected claims must be taught or suggested in the cited reference.

Applicants respectfully assert that Blelloch and its techniques are fundamentally different from what is claimed in Applicants' independent claims.

Blelloch is directed to taking a program, identifying steps within that program called tasks, determining dependencies if any of those tasks, weighting the tasks, and then parallel processing a number of the tasks that can be performed in parallel on the bases of the weights. Again, the Examiner's attention is directed to column 1, lines 34-42 and column 2 lines 19-23. A programming language or a sequential program reveals tasks to be performed by parallel processing. Furthermore, precedent tasks are identified and ordered; see column 3 lines 31-37.

The Examiner appears to cite columns 5 lines 15-29 and columns 6 lines 20-28 for the proposition that the tasks are the same. Applicants respectfully assert that this interpretation is not correct and is not what Blelloch teaches. A reading of these passages reveal that the processing element that processes a particular task may be the same or the value of the weights from different tasks may be weighted the same, but the tasks themselves are not the same and these passages do not indicate that they are the same as the Examiner appears to be asserting. These passages are discussing weights of different tasks being the same and not tasks that are the same. In fact, Blelloch completely lacks any teaching of the same tasks from a program being processed in parallel. That makes sense, because Blelloch does not teach replicating a task or even a program; rather Blelloch teaches breaking discrete and different tasks of a sequential program up and parallel processing some of them that can be processed in parallel.

Applicants respectfully disagree with how the Examiner is interpreting Blelloch and assert that even a generous and broad reading of Blelloch lacks any teaching and suggestion of a

teaching where it may be even remotely said that the same tasks (functions) are processed in parallel.

The Examiner's attention is also directed to columns 4 lines 60-62 and columns 5 lines 54-56 where it is clearly stated that distinct tasks and not duplicate, same, or replica tasks are processed in parallel.

Accordingly, Applicants respectfully assert that Blleloch is fundamentally different from what Applicants have claimed. Specifically, Blleloch does not permit, teach, or suggest, the same functions to be processed in parallel; rather, Blleloch intentionally and deliberately identifies discrete, distinct, and different tasks (functions) of a program and resolves any dependencies and then processes selective groupings of those different tasks in parallel. Applicants respectfully request some indication from the Examiner within Blleloch beyond a reference to the same weight for two different tasks where there is even a remote indication that tasks, which are the same, are processed in parallel with one another. Lacking such a reference, Applicants respectfully assert that the present rejections of record are not sustainable.

Therefore, Applicants respectfully request that the rejections with respect to Blleloch be withdrawn.

§103 Rejection of the Claims

Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Blleloch et al. (U.S. Patent No. 5,768,594) in view of Shah et al. (U.S. Publication No. 2002/0035556). Claim 16 is dependent from amended independent claim 15; thus, for the amendments and remarks presented above with respect to claim 15, the rejection of claim 16 should be withdrawn. Applicants respectfully request an indication of the same.

Claims 20 and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Blleloch et al. (U.S. Patent No. 5,768,594) in view of Klein (U.S. Patent No. 6,185,590). Claim 20 is dependent from amended independent claim 18 and claim 32 is dependent from amended independent claim 30; therefore, for the amendments and remarks presented above with respect to claims 18 and 30, the rejections of claims 20 and 32 should be withdrawn. Applicants respectfully request an indication of the same.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney at (513) 942-0224 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By their Representatives,

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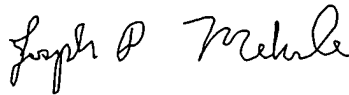
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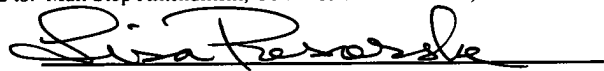
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 18 day of January, 2006.

LISA ROSORSKE

Name



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